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## (54) REINFORCED SENSOR PROBE

(57)Abstract:

PURPOSE: To attempt to increase tensile strength of a sensor probe by disposing a reinforcing strand along an optical fiber and mounting this reinforcing strand to the optical fiber directly at the near and distal ends of the optical fiber via mounting means.

CONSTITUTION: Sensor probe 12 is composed of distal sensor probe portion 14 which comprises oxygen sensor 20, carbon dioxide sensor 22 and pH sensor 24; intermediate tubular portion 16; and distal portion 18 connected with analysis apparatus. Each of sensors 20, 22 comprises an electromagnetic conduction portion formed by an optical fiber, and sensor 24 is arranged to be centered via spacer 26 of silicon in the distal end of sensor probe portion 14. Further, in intermediate tubular portion 16, a reinforcing strand 32 as a structure for reinforcing the sensor probe is disposed along a bunch of optical fibers, and this reinforcing strand is connected to the optical fiber bunch at the near and distal ends thereof via thermoplastic tubular members 34, 36.



## LEGAL STATUS

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